

CLAIMS

1. A peptide fragment or a series of peptide fragments having a cell death-inhibitory activity, said peptide fragment or said series of peptide fragments having the amino acid sequence consisting of 103 amino acid residues at the C-terminal of selenoprotein P, or having said amino acid sequence with one or several amino acid residues therein being deleted, substituted or added, or having a partial sequence of either of the above amino acid sequences.

2. The peptide fragment or a series of peptide fragments of claim 1, having the amino acid sequence of the formula (I):

Lys Arg Cys Ile Asn Gln Leu Leu Cys Lys Leu Pro Thr Asp Ser
Glu Leu Ala Pro Arg Ser Xaa Cys Cys His Cys Arg His Leu
(SEQ ID NO: 1)

and/or the formula (II):

Thr Gly Ser Ala Ile Thr Xaa Gln Cys Lys Glu Asn Leu Pro Ser
Leu Cys Ser Xaa Gln Gly Leu Arg Ala Glu Glu Asn Ile (SEQ ID
NO: 2)

wherein Xaa is selenocysteine, or having a partial sequence of these amino acid sequences.

3. The peptide fragment or a series of peptide fragments of claim 1 or 2 wherein said peptide fragment or fragments are derived from plasma proteins.

4. The peptide fragment or a series of peptide fragments of any one of claims 1 to 3, wherein said peptide fragment or fragments (a) are recovered in fractions of molecular weight 10 kDa to 30 kDa by molecular size fractionation with membrane; (b) have structures showing isoelectric points at between pH 7 and pH 8 and at pH 8 or more in blood as a result of testing of binding to ion exchange resin; (c) show two bands at molecular weight 13 to 14 kDa and two bands at 16 to 17 kDa, the latter being a glycosylated form of the former, in non-reductive SDS-PAGE; and (d) have a band pattern of 3 to 4 kDa, 7 to 9 kDa and 10 to 12 kDa in SDS-PAGE under reductive condition in addition to the bands in (c).

5. The peptide fragment or a series of peptide fragments of any one of claims 1 to 4, wherein said peptide fragment or fragments correspond to the bands at 3 to 4 kDa, 7 to 9 kDa and 10 to 12 kDa in SDS-PAGE under reductive condition.

6. A medicament for protecting from exacerbation of conditions of, preventing or treating diseases related to cell death, comprising as an active ingredient the peptide fragment or a series of peptide fragments having the cell death-inhibitory activity of any one of claims 1 to 5.

7. The medicament of claim 6 wherein said diseases are selected from AIDS, Parkinson's disease, Alzheimer's

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disease, arteriosclerosis, and diseases in which reperfusion injury is observed such as myocardial infarction, cerebral infarction or organ transplantation.

8. A medicament for protecting from exacerbation of conditions of, preventing or treating diseases related to oxidation/reduction reaction, comprising as an active ingredient the peptide fragment or a series of peptide fragments having the cell death-inhibitory activity of any one of claims 1 to 5.

9. A medicament for protecting from exacerbation of conditions of, preventing or treating diseases in which cells of the immune system are involved, comprising as an active ingredient the peptide fragment or a series of peptide fragments having the cell death-inhibitory activity of any one of claims 1 to 5.

10. An additive for cell culture comprising as an active ingredient the peptide fragment or a series of peptide fragments having the cell death-inhibitory activity of any one of claims 1 to 5.

11. A method for screening a cell death-inhibitory activity which comprises adding a candidate substance suspected of having a cell death-inhibitory activity to human megakaryoblast culture system with serum free medium supplemented with 0.01 to 0.5% albumin in which sudden cell death is observed, and estimating an extent of cell death

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14. The antibody of claim 12 or 13 wherein said peptide fragment or a series of peptide fragments are derived from plasma proteins.

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